

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION

ATTY DOCKET: 48770

OF: HIBST ET AL.

CONFIRMATION No.: 9890

SERIAL NO. 09/622,173

GROUP ART UNIT: 1764

FILED: AUGUST 14, 2000

EXAMINER:  
NECKEL, ALEXA DOROSHENK

FOR: COMBINATORIAL PREPARATION AND TESTING OF  
HETEROGENEOUS CATALYSTS

Honorable Commissioner for Patents  
Alexandria, Virginia 22313-1450

REPLY UNDER 37 C.F.R. §1.111

Sir,

In response to the non-final Office action of April 3, 2006, it is respectfully requested the following remarks and amendments be entered and considered for further prosecution of the above mentioned application.

- (1) A listing of claims is provided on page 2 of this paper
- (2) Remarks are provided on page 5 of this paper.

CLAIMS

1. (currently amended) An array of heterogeneous catalysts and/or their precursors comprising a body which is a metallic tube-bundle reactor or metallic heat exchanger which has parallel through-channels in the form of tubes, surrounded by a shell through which a heating or cooling medium can be conducted and in which at least n channels comprise n different heterogeneous catalysts and/or their precursors, where n is at least 10, and wherein the channels are each a connection running through the body between two orifices situated on the body surface which permits the passage of a fluid through the body.
2. (currently amended) An array of heterogeneous catalysts and/or their precursors as claimed in claim 1, wherein the heterogeneous catalysts are inorganic heterogeneous catalysts.
3. (currently amended) An array of heterogeneous catalysts and/or their precursors as claimed in claim 1, wherein the tubes have an internal diameter of from 0.2 to 70 mm.
4. (currently amended) An array of heterogeneous catalysts and/or their precursors as claimed in claim 1, wherein the heterogeneous catalysts and/or their precursors are unsupported catalysts or supported catalysts and/or their precursors and are present as a catalyst bed, tube-wall coating or auxiliary support coating.
- 5-21. (cancelled)

22. (currently amended) An array of heterogeneous catalysts and/or their precursors as in claim 1, wherein n is at least 100.
23. (new) An array of heterogeneous catalysts and/or their precursors as in claim 1, wherein the heat exchange medium flows through the shell around all of the tubes for heating or cooling the tubes uniformly.
24. (new) An array of heterogenous catalysts and/or their precursors comprising n different heterogeneous catalysts and/or their precursors and are arranged in n parallel through-channels of a metallic tube-bundle reactor or metallic heat exchanger, the tube bundle-reactor or heat exchanger comprising a body having the parallel through-channels in the form of tubes, surrounded by a shell through which a heating or cooling medium can be conducted, and wherein the channels are each a connection running through the body between two orifices situated on the body surface which permits the passage of a fluid through the body, and wherein n is at least 10.
25. (new) The array of heterogenous catalysts and/or their precursors as in claim 24, wherein there is a space between the parallel through channels in the form of tubes and the shell through which the healing or cooling medium can be conducted and flow freely around the tubes for heating or cooling the tubes uniformly.

26. (new) An array of heterogeneous catalysts and/or their precursors comprising a body which is a metallic tube-bundle reactor or metallic heat exchanger consisting essentially of parallel through-channels in the form of tubes, surrounded by a shell through which a heating or cooling medium can be conducted and in which at least  $n$  channels comprise  $n$  different heterogeneous catalysts and/or their precursors, where  $n$  is at least 10, and wherein the channels are each a connection running through the body between two orifices situated on the body surface which permits the passage of a fluid through the body.